

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/582,982  
Source: JFWP  
Date Processed by STIC: 6/26/06

***ENTERED***



IFWP

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/582,982

DATE: 06/26/2006  
TIME: 13:31:35

Input Set : A:\Sequence.txt  
Output Set: N:\CRF4\06262006\J582982.raw

3 <110> APPLICANT: SHIPMAN, Robert C.  
 4 LEE, David K. H.  
 6 <120> TITLE OF INVENTION: MATERIALS AND METHODS FOR ANALYSIS OF ATP-BINDING CASSETTE  
 7 TRANSPORTER GENE EXPRESSION  
 W--> 0 <130> FILE REFERENCE:  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/582,982  
 C--> 10 <141> CURRENT FILING DATE: 2006-06-15  
 W--> 12 <130> FILE REFERENCE: 13516-4  
 W--> 12 <130> FILE REFERENCE: 13516-4  
 14 <150> PRIOR APPLICATION NUMBER: US 60/529,082  
 15 <151> PRIOR FILING DATE: 2003-12-15  
 17 <160> NUMBER OF SEQ ID NOS: 141  
 19 <170> SOFTWARE: PatentIn version 3.3  
 21 <210> SEQ ID NO: 1  
 22 <211> LENGTH: 598  
 23 <212> TYPE: DNA  
 24 <213> ORGANISM: Homo sapiens  
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 31 cagaagaaaa taataagccc tctatacata aatgcccagc acaattcatt gttaaaaaac 180  
 33 aaccaaacct cacactactg tatttcatta tctgtactga aagcaaatgc tttgtgacta 240  
 35 ttaaatgtt cacatcattc attcactgtt tagtaatcat tgactaaagc catttgtctg 300  
 37 tggtttcttc ttgtgggtgt atatatcagg taaaatattt tccaaagagc catgtgtcat 360  
 39 gtaataactga accacttga tattgagaca ttaatttgc cccttgcatt tatctactag 420  
 41 taataatgtt atactgtaga aatattgctc taattttttt caaaaattgtt gcatccccct 480  
 43 tagaatgtt ctatcccatt aaggatttag gtatgctatt atcccttctt ataccctaag 540  
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 49 <211> LENGTH: 568  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Homo sapiens  
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 58 ccagggcctg gagtggaggt tcaggaccaaa gggggttctg gtcctccagc ccctgtactc 180  
 60 ggccatgccc tgcggtcaact gcggttgcgg cccctaattt tgccaaaggc tgaccggcc 240  
 62 cgggctgcgt acacccttgc cctgctttgc cttaaaggct cggggctgc ccggccccc 300  
 64 gcccctgcct ggcactgctc accgccccaaag ggcacgcccgg ctggaccagg cactgctggc 360  
 66 ctttctctcg cccggcctcg gaaccagctt ttctcttta cgtatgaaaggc tgatgcccag 420  
 68 agcgggctgt gggcggagct gggtcagttc cgtattttt ttgcttttag aagaggctcc 480  
 70 tctggccctg ctctctgca gggaggtggc tgtcccgccg gaagccatca gcttggccca 540  
 72 gctggcaggt ggcaggaatg gagaagct 568

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85 gtctcgccat caggcaggga caggacgggc aagcaggccc catcttacat cctctctc 180  
87 caagtttata tcatccctta tttttatca ctttttcta tgatggatat gaaaaattca 240  
89 aggcagtatg cacagaatgg acgagtcgag cccagccctc atgcccagga tcagcatgct 300  
91 catctccatg tctgcatact ctggagttca ctttcccaga gctggggcag gcccggcagt 360  
93 ctggggcaa gctccgggggt ctctgggtgg agagctgacc caggaaggc tgcaagctgag 420  
95 ctgggggtt aatttccca ggcactccct ggagagagga cccagtact tgtccaagtt 480  
97 tacacacgac actaatactcc cctggggagg aagcgggaag ccagccaggt tgaactgttag 540  
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114 tcagcatctc aagtccaaat ttggagatgg ctatatcgcc acaatgaaga tcaaatcccc 180  
116 gaaggacgac ctgcttcctg acctgaaccc tgtggagcag ttcttccagg ggaacttccc 240  
118 aggcaagtgtg cagagggaga ggcactacaa catgtccag ttccaggctt cttccctctc 300  
120 cctggcgagg atcttccagc tccttccttc ccacaaggac agcctgctca tcgaggagta 360  
122 ctcagtcaca cagaccacac tggaccagggt gtttgtaaat tttgcttaac agcagactga 420  
124 aagtcatgac ctccctctgc accctcgagc tgctggagcc agtcgacaag cccaggactg 480  
126 atctttcaca ccgctcggtt ctgcagccag aaaggaaactc tggcagctg gagggcggcagg 540  
128 agcctgtgcc catatggtca tccaaatggc ctggcccgcc gtaaatgacc ccactgcagc 600  
130 agaaaaacaaa cacacgagga gcatgcagcg aattcagaaa gaggtcttca agaaggaaac 660  
132 cggaaactgac ttgcacactt ggaacacccat atggtaaac caaacaata caaaatccctt 720  
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139 <212> TYPE: DNA  
140 <213> ORGANISM: Homo sapiens  
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145 gttcagtccc tttcacaatc ttttttaag ctggaaaggaaat ctaaacatgc ttttgcatt 120  
147 gaagaatata gctttctca agcaacattt gaaagggtt ttgttagact cactaaagaa 180  
149 caagaggagg aagataatag ttgtggactt ttaaacagca cactttgtg ggaacgaaca 240  
151 caagaagata gagtagtatt ttgaattttt attgttcgtt ctgcttactt ggacttctt 300  
153 ctttttcaact taattttaaac tttggttttaa aaaggaaaaattt attggaaatgg taactggaga 360  
155 accaagaacg cacttggaaat ttttctaagc tccttaattt gaaatgtgtt gttgtgtt 420  
157 ttgttttttctt ttaataaaaaa cgtatgtata attaagtggaa gctgcgtt ttttatttgaag 480  
159 tatattgaac tatatgtttt gttatgtcatc ttttccacca ttcagaaaca gtgtttcttga 540  
161 atttggattt taaaggaaat gtaatagaat agtttttattt ttaagttatc tttttttttt 600

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163	tgccatcttc	ttaaataagt	acgtaatgtt	ccaatctaaa	taaaaaaacta	atacataact	660
165	aatgcata	aaagatacat	aaagcaatgt	gaaagttct	tgcttcct	tttaatttc	720
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178	ctacgggcat	agacccca	gggcagcagc	aatgtggca	ggcaatccag	gcagtcgtt	120
180	aaaacacaga	gagagggtgc	ctcctgacca	cccataacct	ggctgaggcg	gaagccttgc	180
182	gtgaccgtgt	ggccatcatg	gtgtctggaa	ggcttagatg	cattggctcc	atccaacacc	240
184	tgaaaaacaa	acttggcaag	gattacattc	tagactaaa	agtgaaggaa	acgtctcaag	300
186	tgacttttgtt	ccacactgag	attctgaagc	ttttccaca	ggctgcaggg	cagggaaaggt	360
188	attcctcttt	gttaacctat	aagctgcccg	tggcagacgt	ttaccctcta	tcacagacact	420
190	ttcacaaattt	agaagcagt	aagcataact	ttaacctgga	agaatacagc	ctttctcagt	480
192	gcacactgga	gaaggatttc	ttagagctt	ctaaagaaca	ggaagtagga	aattttgatg	540
194	aagaaattga	tacaacaatg	agatggaaac	tcctccctca	ttcagatgaa	ccttaaaaacc	600
196	ttaaacctag	taattttttt	ttgatctcct	ataaaacttat	gttttatgt	ataattaata	660
198	gtatgtttaa	ttttaaagat	catttaaaat	taacatcagg	tatattttgt	aaatttagtt	720
200	aacaatata	taaattttaa	aattatttt	cctctcaa	ataggggtga	tagcaaacc	780
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215	ccctgcgggt	gccccggca	aggccccagc	cgccagcggc	cttcgtggcg	gcccagttcc	180
217	ctgggtcgga	gctgcgcgag	gcacatggag	gccgcctcg	cttcagctg	ccggcgggag	240
219	ggcgctgcgc	cctggcgcc	gtcttggag	agctggcggt	gcacggcgca	gagcacggcg	300
221	tggaggactt	ttccgtgagc	cagacgatgc	tggaggaggt	attcttgatc	ttctccaagg	360
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225	cgccaggcct	gcagcacccc	aaacgcgtca	gccagttct	cgatgaccct	agcaactgccc	480
227	agactgtgt	ctgagcctcc	ctccctcg	ggggcgcgg	gaggccctgg	aatggcaag	540
229	ggcaaggtag	agtgcctagg	agccctggac	tcaggctgg	agagggctg	gtgccctgg	600
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242	agagccttaa	aaaaaccaat	tctgtgttcc	tgtttaaacc	cgtggttttt	tttaataata	120
244	tttattttta	tagcagcaat	gttctattt	tagaaactat	attataagta	cagaaatgtt	180
246	tctccgtgt	gtggggaggag	gagggtcg	tgtctggtaa	gtgccatgtc	agtgtggaca	240
248	gaggcattt	actaagccaa	cctccctctca	cagcctctgt	atctctgcag	gccataactgg	300
250	ttccattgtt	ctgtataata	ctgataaaat	aaatttactt	ttacatgtatc	gtataagttt	360

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256	tgatactttc	ctaagaattt	aacatgtcat	attttggaaa	tagatctaag	tgtgcttctt	540
258	attgctaaaa	atactaaatg	tcatgggtca	tagtatctga	tatcaatatac	gttgataaca	600
260	tatccacagg	taacaccatg	atgttaggcat	aatggaaaaa	caaaaacccct	actatttcaa	660
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275	caaaatatta	aatattttct	tatTTTTT	attaaagtat	aaattaagac	accctattga	180
277	cttccgggtta	aggggagtca	attgattacc	cagcagcaca	gtatttgcTT	tttataattc	240
279	cctttttaaa	tacttggct	taattgactg	gttttcctt	tctgtcattt	ttcagagttt	300
281	agattgtgag	tccatgtttt	gtctgttgc	cctataaagg	aaatttggaaa	tctgtatcat	360
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285	cttggAACCA	acccaaataac	ccacaaatga	tagaccggat	aaagaaaacg	tgacacata	480
287	acaccaatgg	atactatgca	gccatagaaa	aggatgagtt	catattctc	acagggacat	540
289	ggatgaagct	ggaaaccatc	atcctcagca	aactaacaca	ggaacagaaaa	acccaaacacc	600
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333	ggatctctgg	gtcacgttga	ttctcacagc	tcattagttg	gctactgtcc	tcaggaagat	180
335	gccttagatg	acctggtaac	tgtggagaaa	catttgttatt	tctatgccag	ggtacatgg	240
337	attccagaaa	aggatattaa	agaaactgtt	cataaaactcc	ttaggagact	tcacactgtat	300
339	cccttcaaaqq	acaaqaqctac	ctctatgtqc	agttatqca	caaaaqaaaa	attatccact	360

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345	tcc	gt	cat	cc	tc	ac	at	ct	tc	ga	aa	ga	at	gt	ta	c	ag	gtt	gg	cc	540		
347	att	at	gg	ttg	aa	atg	ttt	gt	ttt	gc	ag	ca	cata	aa	aa	gg	cag	gtt	ttt	600			
349	gg	ac	gagg	at	tt	act	gt	caa	at	ttt	gc	aa	ataa	aca	a	atg	acc	at	ttt	660			
351	aca	aa	agg	tt	ca	tgc	ag	ttt	cc	aaa	ac	ata	ttt	aa	a	atg	ac	ca	c	c	720		
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368	gaa	aca	ac	gc	tt	g	cc	at	tt	tt	ca	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	240
370	tga	agg	cc	ac	tg	ca	tc	gt	tc	tt	ca	aa	ag	tt	gt	cc	ca	aa	gg	aa	gg	aa	300
372	ag	cc	cag	ag	aa	gg	aa	gg	at	ttt	cc	cc	cc	cc	cc	cc	cc	cc	cc	cc	cc	cc	360
374	ag	act	tt	a	ta	ta	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	420
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378	gt	ta	ct	gt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	540
380	at	tt	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	aa	600
382	c	ag	tca	aa	gt	tt	tc	tt	tc	tt	tc	tt	tc	tt	tc	tt	tc	tt	tc	tt	tc	tt	660
384	ca	at	gt	gg	aa	at	tc	at	tt	tt	aa	tt	aa	tt	aa	tt	aa	tt	aa	tt	aa	tt	720
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403	tcc	gg	aa	acc	gt	gt	ta	ct	ct	gg	at	cc	ac	ca	ca	ca	ca	ca	ca	ca	ca	ca	240
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411	cc	at	at	gt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	480
413	at	tc	cc	ct	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	540
415	tc	c	agg	at	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	tt	600
417	gata	at	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	tc	660
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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:42; N Pos. 45,251,255,504,513,643

## VERIFICATION SUMMARY

PATENT APPLICATION: US/10/582,982

DATE: 06/26/2006

TIME: 13:31:36

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\06262006\J582982.raw

L:0 M:201 W: Mandatory field data missing, <130> FILE REFERENCE  
L:9 M:270 C: Current Application Number differs, Replaced Application Number  
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:12 M:280 W: Numeric Identifier already exists, <130> found multiple times  
L:12 M:281 W: Numeric Fields not Ordered, <130> not ordered!.  
L:1357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0  
L:1365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:240  
L:1373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:480  
L:1377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:600